

MAFB rs2902940 and rs6102059 SNPs were determined by the Snapshot technology platform.

RESULTS The AA genotype of rs2902940 SNP was associated with an increased risk of CAD (adjusted OR = 1.63, 95% CI = 1.07-2.48, $P = 0.023$) and IS (adjusted OR = 1.69, 95% CI = 1.09-2.61, $P = 0.017$). The GA/AA genotype was also associated with an increased risk of CAD (adjusted OR = 1.56, 95% CI = 1.04-2.32, $P = 0.030$ for GA/AA vs. GG) and IS (adjusted OR = 1.72, 95% CI = 1.14-2.60, $P = 0.010$ for GA/AA vs. GG). Significant interactions were observed only in those with higher BMI, hypertension and diabetes ($P < 0.05$). The subjects with GA/AA genotypes in controls had lower serum ApoAI levels than the subjects with GG genotype ($P = 0.024$).

CONCLUSIONS The A allele carriers of SNP rs2902940 in the MAFB conferred a decreased serum ApoAI levels in controls and an increased risk of CAD and IS. The GA/AA genotypes interacted with higher BMI, hypertension and diabetes to contribute the risk of CAD and IS.

GW26-e2341

Prevalence of Congenital Heart Disease in Xinjiang Multi-Ethnic Region of China

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OBJECTIVES This multiple-ethnic, community-based, cross-sectional study was conducted to estimate the prevalence and distribution of congenital heart disease (CHD) in Xinjiang, northwestern part of China. Four major ethnics, Han, Uygur, Kazakh, and Hui Chinese in this region were investigated during February 2010 and May 2012.

METHODS A total of 14,530 children (0-18 yr) completed the survey and were examined. Those suspected of having the CHD were further evaluated with electrocardiograph (ECG) and the diagnosis was confirmed by echocardiography.

RESULTS Of these children, 240 (boys, 43.8% and girls, 56.3%) were identified with CHD, giving an overall prevalence of 16.5‰ (17.7‰ in Uygur, 6.9‰ in Han, 11.4‰ in Kazakh, and 38.1‰ in Hui Chinese, respectively). Ventricular septal defect (VSD, 29.2%), atrial septal defect (ASD, 20.8%), patent ductus arteriosus (PDA, 13.7%), aortic coarctation (13.7%), Bicuspid aortic valve (7.9%), pulmonary valve stenosis (5.4%), tetralogy of fallot (TOF, 4.2%) were common acyanotic and cyanotic defects observed. Further, among these CHD children, 27.1% mothers had a history of abortion, and 24% caught a cold, 10% had a febrile illness and 6.7% received antibiotic treatment during the first trimester of pregnancy. The highest incidence of CHD in Hui children at 0-6 yrs group was observed with the highest percentage of CHD family history and consanguinity.

CONCLUSIONS The overall prevalence of CHD in four ethnical children at age of 0-18 yr in Xinjiang was 16.5‰. VSD, ASD and TOF were the most common acyanotic and cyanotic congenital heart defects, respectively. This study also investigated some modifiable risk factor which may link to the difference in the incidence of CHD among the 4 ethnical groups.

GW26-e2353

The Immediate Effect of ATP and Nitroglycerin on Coronary Slow-flow Angina Pectoris

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OBJECTIVES To study the immediate effect of injecting ATP and nitroglycerin into coronary artery on treating Coronary Slow Flow Angina (CSFA).

METHODS 56 patients, complaining the Angina symptom, without stenotic lesions of epicardial major arteries and with slow flow in anterior descending branch (LAD), both of which verified by coronary angiography, were chosen among 2842 patients undergoing coronary angiography between May, 2009 and Dec, 2011. They were assigned to ATP (31) and nitroglycerin (25), Control group (34, patients with

matched age, gender, cardiovascular risk factor and normal coronary angiography). In the ATP group, coronary angiography was re-performed after quickly injecting ATP 40ug into coronary by angiographic catheter. In the nitroglycerin group, patients were dealt with nitroglycerin 200ug. The coronary blood flow was measured by TIMI Frame Count (TFC). Obtain TFC values which recorded in liver position in LAD slow-flowing patients before and after the treatment and in normal patients.

RESULTS 1. Basic TFC value was 76.3 ± 20.6 in the ATP group, 73.8 ± 18.3 in the nitroglycerin group and 28.7 ± 2.6 in the control group. 2. TFC value was reduced to 26.3 ± 3.2 in the ATP group after the treatment (Compared to the value before the treatment, $P < 0.01$. Compared to the control group, there was no significant difference.). The value was reduced to 48.6 ± 8.2 in the nitroglycerin group after the treatment (Compared to the value before the treatment, $P < 0.01$. The value was above the level of the control group, $P < 0.05$). The TFC value before and after ATP treatment was obviously higher than the nitroglycerin group ($P < 0.05$). 3. For the 15 patients in the nitroglycerin group, mean TFC value was 56.6 ± 6.2 , after another treatment-injecting ATP 40ug, TFC value was reduced to 26.6 ± 4.7 (In contrast to nitroglycerin treatment, $P < 0.01$. Compared to the control group, $P > 0.05$, no significant difference).

CONCLUSIONS After ATP injection, the immediate coronary flow was normalized in patients with CSFA, superior to nitroglycerin treatment. For the poor recovery patients after nitroglycerin treatment, giving ATP could make coronary flow reach to normal level. Obviously, the major pathologic change of myocardial ischemia caused by CSFA was located in microvessel.

GW26-e3583

Correlation between platelet parameters, hypersensitive C-reactive protein and clopidogrel reactivity in unstable angina patients

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OBJECTIVES Unstable angina is a severe type of coronary heart disease (CHD). Dual antiplatelet therapy with aspirin and clopidogrel was established as a cornerstone of therapy in patients with unstable angina (UA) and stent implantation. Platelet inhibition by clopidogrel varies from one individual to the next. We refer those treated with clopidogrel had minimal or no alternation in platelet function as clopidogrel resistance (CR) or high on-treatment platelet reactivity (HTPR). CR is considered a failure of antiplatelet treatment. Patients who have CR are at increased risk of major adverse cardiac events. Recent studies have identified numerous influencing factors for the antiplatelet effect of clopidogrel. The aim of this study was to explore the association between platelet parameters, hs-CRP and clopidogrel resistance.

METHODS A total of 124 unstable angina patients were enrolled in this study from November 2013 to January 2014, in the second hospital of Hebei Medical University. All patients had not taken aspirin or clopidogrel that affect platelet function. Blood routine test, coagulation routine test, myocardial enzyme, hepatic function, renal function, plasma lipid, platelet aggregation rate (PAR_0) were checked within one day. A loading dose of 300mg clopidogrel and 300mg aspirin were given to all the patients, and 75mg/d clopidogrel and 100mg/d aspirin were maintained. Platelet aggregation rate was remeasured at 7th day (PAR_7). According to the degree of platelet aggregation inhibition [$DPAI$, $DPAI = (PAR_0 - PAR_7) / PAR_0$], all patients were divided into clopidogrel resistance group (CR) and clopidogrel sensitive group (CS). There were 33 cases (19 males and 14 females) in CR group, the mean age was 61.91, while there were 91 cases (49 males and 42 females) in CS group, and the mean age was 62.40. Platelet parameters including platelet count (PLT), mean platelet volume (MPV), platelet distribution width (PDW) and hypersensitive C-reactive protein (hs-CRP) levels were compared between the two groups.

RESULTS 1. Baseline clinical characteristics: There was no significant difference between CR group and CS group in age, gender, BMI, history of hypertension, history of diabetes mellitus, smoking history and drinking history.

2. Platelet parameters and hs-CRP level: The PLT, PDW, PCT levels had no significant difference between the CR group and the CS group. The MPV level was significant higher in the CR group than that of CS group (9.31 ± 1.00 fl vs. 8.48 ± 0.96 fl, $P < 0.05$). And the hs-CRP level was significant higher in the CR group than that of CS group (6.62 ± 4.30 vs. 3.38 ± 3.18 , $P < 0.05$).